

## IN THIS CHAPTER

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- How to use the Skype service (in conjunction with the Skype app) to make and receive voice-over-IP calls and participate in free video calls

# 20

## VIDEOCONFERENCING AND VOICE-OVER-IP (VOIP) CALLING

All of the more recent iPhone, iPad and iPod touch models that have a front-facing camera allow you to shoot digital images or video clips (using the Camera app). These same cameras, along with your device's built-in microphone and speaker (or an optional corded or wireless headset), can be used for real-time video calls.

iOS 6 comes with the FaceTime app preinstalled. When your iOS device is connected to the Internet via a Wi-Fi connection, the FaceTime app enables you to participate in real-time video calls with any other FaceTime users.



### NOTE

Making and receiving calls using FaceTime and participating in videoconferences is free. You can make or receive an unlimited number of calls and stay connected for as long as you'd like. Depending on



your wireless data provider (and your wireless data plan), you may or may not be allowed to use FaceTime with a 3G/4G Internet connection. The app, however, works very well, and with no limits, using a Wi-Fi connection.

The first time you use FaceTime, you need to set up a free account. If you're using an iPhone, by default, your account utilizes your iPhone's unique ten-digit phone number. When you make or receive a call using the Phone app, if your iPhone determines that the person you're connecting with also has FaceTime available, simply tap on the FaceTime icon to launch the FaceTime app and convert the traditional call into a video call.

When using FaceTime on an iPad, iPod touch or Mac, however, you need to either link your Apple ID to your FaceTime account or link another email address that will be used as your unique FaceTime identifier (instead of a phone number).



**TIP** Your iPhone's phone number, the Apple ID, or the email address you link to your FaceTime account serves as your unique identifier when you're using FaceTime. It enables others to initiate a FaceTime connection with you when you both have FaceTime running on your devices. Likewise, if you want to call another FaceTime user with this app, you need to know the email address that the user has associated with FaceTime, or her iPhone phone number.

After this setup process is complete (it takes less than a minute), as long as you have FaceTime running on your iPad or iPod touch, and it's connected to the Internet, you can initiate or receive calls and participate in video calls. By default, FaceTime automatically launches on your iPhone when a connection can be made with another FaceTime user.



**NOTE** On the iPhone, FaceTime functionality is built into the Phone app. Thus, your Favorites and Recents list within the Phone app can and will incorporate FaceTime-related calls. On the iPad and iPod touch (as well as the Mac), FaceTime is a stand-alone app.

## HOW TO USE FACETIME FOR VIDEO CALLS

To launch the FaceTime app, first look near the upper-left corner of your iOS device's Home Screen, and make sure that it is connected to the Web using a Wi-Fi

connection. The Wi-Fi signal strength icon will be displayed if a Wi-Fi connection exists. (If your wireless data provider allows you to use a 3G/4G Internet connection with FaceTime, make sure your device has a strong wireless data signal.)

## LAUNCH FACETIME ON YOUR IPHONE

On the iPhone, FaceTime is launched through the Phone app. When you initiate a call with another iPhone user, on the main phone screen after a call is connected, the FaceTime icon becomes active, meaning that if you tap on it, a videoconference connection will be made.

You can also look up contacts listed in your Contacts database from the Phone app (by tapping on the Contacts icon). If the contact entry you're looking at is also able to connect to FaceTime, the FaceTime icon becomes active and a tiny video-camera icon will appear in it.

Finally, if you receive an incoming call from another FaceTime user, your phone rings but you're notified that the call is a FaceTime request, as opposed to a regular incoming call. If you accept the request, a FaceTime connection is automatically established between the two devices, and a videoconference begins.



### NOTE

After a FaceTime videoconference connection is made between your iPhone or iPad and another FaceTime user, the main FaceTime screen looks identical, regardless of which device you're using. See the section, "Participating in a FaceTime Call."

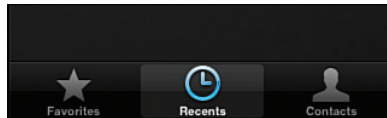
## LAUNCH FACETIME ON YOUR IPAD

As soon as the FaceTime app launches, the device's forward-facing camera turns on, and you should see yourself on your iPad's screen. On the right side of the screen is a window requesting that you enter your Apple ID and password to sign in (as shown in Figure 20.1). Enter this information using the virtual keyboard, and then tap the Sign In icon that's displayed below the username and password fields. Or you can tap on the Create New Account option to set up a free Apple ID account from within the FaceTime app.

You're now ready to initiate or receive FaceTime calls and participate in videoconferences via the Web. Displayed near the lower-right corner of this app screen are three command icons labeled Favorites, Recents, and Contacts (as shown in Figure 20.2).

**FIGURE 20.1**

*On the iPad, you need to manually launch FaceTime and sign in to your FaceTime account before a videoconference can be established. This step is not necessary when you're using FaceTime on an iPhone.*

**FIGURE 20.2**

*You can decide whom to FaceTime videoconference with using the Favorites, Recents, or Contacts icon that's displayed at the bottom of the FaceTime screen when it's used with an iPad.*

## CREATE A FACETIME FAVORITES LIST

A Favorites list in FaceTime is a list you can customize to include the people with whom you'll FaceTime videoconference with the most. In essence, this Favorites option serves as a one-touch speed-dial list. Tap on the Favorites tab displayed at the lower-right portion of the FaceTime screen (on an iPad) to access it.



### NOTE

On the iPhone, your Favorites List is maintained as part of the Phone app. Tap on the Favorites icon at the bottom of the Phone app's screen. This Favorites list can include either a contact's phone number (to initiate a regular or FaceTime call) or FaceTime account (to initiate a FaceTime videoconference connection).

To add a contact in your Favorites list on the iPad within FaceTime, tap on the plus sign icon that's located in the upper-right corner of the Favorites window, and then select Contacts from your established contacts database (that is created and maintained using the Contacts app).

**TIP**

In the Contacts entry for each person, if that person is an iPhone user, be sure to associate his mobile phone number with the iPhone label, as opposed to the mobile phone label, so that the FaceTime app can easily identify and connect with him.

## FACETIME'S AUTOMATIC RECENTS LIST

On the iPad, when you tap on the Recents icon while using FaceTime, you see a list of people with whom you've already communicated using FaceTime. Tap on any of the contacts in this list to videoconference with that person again.

**NOTE**

On the iPhone, the Recents list pertaining to FaceTime is maintained in the Phone app. When you look at the Recents list on your iPhone, FaceTime connections are highlighted by the appearance of a small video camera icon in conjunction with the contact's name or iPhone number.

If this is the first time you're using the FaceTime app on your iPad, the Recents window will be empty, except for the All and Missed tabs displayed near the top of the window. After you begin using the app on the iPad, the All tab displays all FaceTime videoconferences you've participated in, as well as any incoming missed calls you didn't answer. Tap on the Missed tab to see a list of just the incoming FaceTime calls you didn't answer.

## CHOOSE A CONTACT FROM YOUR CONTACTS DATABASE

The Contacts icon that's displayed near the lower-right corner of the FaceTime screen (on an iPad) enables you to select and call a fellow FaceTime user who is listed within your Contacts database.

Remember that FaceTime works only with other compatible iOS devices or Mac users. When you're calling another iPad, iPod touch, or Mac FaceTime user, the FaceTime app or software must be running on that user's device for her to accept a call. As long as someone's iPhone is turned on and connected to the Internet (via Wi-Fi), the person can automatically receive incoming FaceTime calls.

## HOW TO INITIATE A FACETIME CALL FROM YOUR IPAD

To initiate a call with someone who also has FaceTime installed and operating on his computer or iOS device, select that person from your Contacts list, and tap on the email address or iPhone phone number that he used to register with FaceTime. If a connection can be made, a FaceTime icon appears next to the person's name in the FaceTime app.

When you initiate a call, at the bottom center of the screen, the message "FaceTime with" and the person's name is displayed. Next to this label is the Call End icon, which you can tap at any time to terminate the connection.

## PARTICIPATING IN A FACETIME CALL

When you're using a FaceTime-compatible iOS device, when a FaceTime connection is established with another party, your own image that was displayed in full-screen mode on the device's screen shrinks, and is displayed in the upper-left corner of the screen as a video thumbnail. The rest of the FaceTime screen displays the person you're now connected with using FaceTime.



### TIP

Once the FaceTime connection is established, to move the video thumbnail that shows your video feed (what you're sending to the person you're conversing with) around on the screen, place and hold your finger on the video thumbnail and drag it to any of the screen's other corners.

Notice that near the bottom of the screen are three command icons (as shown in Figure 20.3) labeled Mute, End Call, and Switch Camera. These command icons are used for the following purposes:

- Tap on the Mute button to retain the video connection but mute your iOS device's built-in microphone so that the person you're communicating with can see you but not hear you.
- Tap on the End Call icon to terminate the FaceTime connection and promptly end the call.
- Tap on the Switch Camera icon to alternate between the two cameras built in to your iOS device. The forward-facing camera will be facing toward you, while the camera on the back of the device shows off whatever it's pointing at.

**FIGURE 20.3**

*When a FaceTime video call is underway, your image is displayed in a small window. The person you're talking with appears in the main area of the FaceTime screen, and several command icons display near the bottom center of the screen.*

**NOTE**

When using FaceTime, while you're engaged in a call, if you temporarily exit out of FaceTime to use another app, the audio connection remains active, but your video feed is temporarily paused until you return to the FaceTime app by tapping on the green and white Touch To Resume FaceTime bar that's displayed near the top of the screen.

## TIPS FOR IMPROVING YOUR FACETIME CONNECTIONS

Here are a few basic strategies for improving the quality of your FaceTime connection, which will help to ensure that you'll see and hear the person you're video calling with, and that the other person will be able to see and hear you.

**TIP**

These strategies should be implemented by both you and the person you're video calling with.

- Use a Wi-Fi Internet connection that has a strong signal. If necessary, move closer to the wireless Internet router.
- Participate in a FaceTime video call from a quiet location so that your iPhone or iPad's microphone doesn't pick up background noise that may distort or drown out your voice. Turn off any nearby televisions or radios, for example.

- Make sure that the primary lighting in the area is shining on your face and is not behind you. If too much light is behind you, the person you're video calling with will see your silhouette (as opposed to the detail of your face). Try to position the main light source in front of you so that your face is evenly lit. A light shining from overhead, for example, often causes shadows to appear on your face, which might make you look older or ill.
- While engaged in a video call, refrain from excessive movement. The real-time video image remains clearer if you're sitting or standing still. Try propping your iPhone or iPad on a table using a stand so that the device remains steady and pointed at your face during a FaceTime call.
- When participating in a video call, it's common to forget that the camera is turned on after a while. Refrain from doing anything that you don't want the other person to see and/or hear.
- To improve the audio quality of a FaceTime call, consider using a corded headset (such as Apple's EarPods) or a wireless Bluetooth headset that offers a noise-cancelling microphone and noise-reduction speakers.

**TIP**

If you receive an incoming call on another phone that you want to answer, use FaceTime's Mute feature so that the person you're video calling with won't be able to hear your other conversation.

- The most confusing aspect of FaceTime is making that initial connection with someone else and setting your iOS device to initiate a call to the proper iPhone number, Apple ID, or email address that's associated with that person's FaceTime account. After a connection is established once, future connections can be made with a single tap on the screen.

As you'll discover, the FaceTime app is pretty simple to use and is a powerful tool for video calling. The best thing about using FaceTime is that it's free, and you can communicate with anyone in the world who also uses the FaceTime app or software.

**TIP**

When using FaceTime, you never have to pay long-distance phone charges, international calling fees, or cellphone roaming charges. Nor do you have to worry about using up your cellphone minutes or monthly 3G/4G wireless data usage allocation, as long as you use FaceTime with a Wi-Fi connection. Perhaps the biggest benefit to using FaceTime is that you can actually see *and* hear the person you're communicating with.





## WHAT'S NEW

On the iPhone, when you receive an incoming FaceTime call, to the right of the Decline and Accept buttons is a new video camera icon. Place your finger on this icon and flick upwards to access two additional incoming call management features that can be used if you do not want to answer the incoming FaceTime call.

Tap on the Reply With Message button to send the caller a pre-written or custom text message that informs him that you're unavailable, and will call him later, for example. Or, tap on the Remind Me Later button to set up a reminder for yourself to call back the person who's calling you at a later time.

## USE SKYPE TO MAKE AND RECEIVE VOICE CALLS AND/OR VIDEO CALLS VIA THE INTERNET

Skype is a Voice-over-IP phone service that enables you to make and receive calls over the Web (as opposed to a cellular phone network or traditional telephone landline). In addition to working with the iPhone and iPad, what makes Skype appealing is that the service also works with PCs, Macs, as well as Android-based Smartphones and tablets.

Unlike FaceTime, you're not limited to conversing only with Apple users. The Skype service transforms a computer, Smartphone or tablet into a virtual speakerphone, allowing users to make and receive calls that originate from the Internet. Thus, your iPad can be used to make and receive calls, as long as an Internet connection is available. The Skype app on either the iPhone or iPad can also be used to participate in real-time video calls with other Skype users for free.



## WHAT'S NEW

There is a free Skype app designed for the iPhone, as well as a separate iPad-specific Skype app. Both are available from the App Store, and the latest version of these apps allow users to engage in real-time video calls, as well as voice-only calls.



## NOTE

The Skype app takes advantage of your iOS device's Internet connection, built-in speaker, microphone(s), and cameras to transform the iPhone or iPad into a full-featured telephone or videoconferencing tool. You can also use this app with an optional corded or wireless Bluetooth headset, which

is recommended to improve the audio quality of calls and get rid of ambient noise. Using a headset also increases your level of privacy, by helping to prevent unwanted eavesdroppers.

Making unlimited Skype-to-Skype calls (including videoconference calls) is always free. However, there is a very low per-minute fee to make calls to a landline or cellular telephone from your iOS device using either the iPhone or iPad-specific version of Skype. This per-minute fee is typically just pennies per minute, even if you're traveling overseas and make a call back to the United States. You can also save a fortune on international calling from the United States when making calls to any other country.



**NOTE** Although Skype calls originate from the Internet, calls can be made to (or received from) any landline or cellphone. Thus, your iPhone or iPad, when connected to the Internet via a 3G/4G or Wi-Fi connection, can be transformed into a full-featured telephone, complete with caller ID, conference calling, a mute button, and one-touch dialing.



**CAUTION** Skype works much better (and with no limitations) when used with a high-speed Wi-Fi Internet connection. When used with a 3G/4G connection, it requires a significant amount of wireless data usage and will quickly deplete your monthly wireless data allocation from your wireless service provider, or result in high international wireless data roaming fees if used abroad.

Through Skype, you can obtain your own unique telephone number (for an additional fee of \$6 per month or \$60.00 per year), which comes with call forwarding, voicemail, and other features, so you can manage incoming calls whether or not Skype is activated and your iPhone or iPad is connected to the Web.

When you have your own Skype phone number, people without their own Skype account can reach you inexpensively by dialing your unique Skype phone number from any phone, regardless of where you're traveling. You can, however, initiate calls without paying for a unique phone number.

When you're traveling abroad, making and receiving calls on a cellphone (such as an iPhone) costs anywhere from 50 cents to \$3 per minute because international roaming fees apply. However, with Skype, that same call costs just 2.3 cents per minute, or you can pay a flat fee of less than \$20 per month to make and receive unlimited domestic and international calls via Skype from your iOS device.

**NOTE**

In terms of call quality, as long as you're within a 3G/4G coverage area or a Wi-Fi hotspot and your iOS device has a strong web connection, calls will be crystal clear.

The Skype app is easy to use and enables you to maintain a contacts list of frequently called people (although it also links with the Contacts database associated with the Contacts app). You can also dial out using a familiar telephone touch-pad display, and maintain a detailed call history that lists incoming, outgoing, and missed calls.

If you opt to establish a paid Skype account (to have your own unique phone number or make Skype-to-non-Skype calls), setting up the account takes just minutes when you visit [www.Skype.com](http://www.Skype.com), and all charges are billed to a major credit card or debit card.

Keep in mind, when using Skype with an iOS device, the quality of your call connection relates directly to the strength of the Internet signal your iPhone or iPad is using. If you experience poor call clarity and you're using a Wi-Fi Internet connection with your iOS device, move closer to the wireless router to enhance the signal strength and improve call clarity.

When you don't have Skype activated, if you have your own Skype phone number, you can automatically forward incoming calls to another number or have them go directly to your Skype voicemail account.

On the iPad, to access the call forwarding feature, tap on your name that's displayed in the upper-left corner of the screen to reveal the My Info window. On the iPhone, tap on the My Info icon that's displayed in the lower-right corner of the Skype app's screen. Next, tap on the Call Forwarding feature to turn it on, and then enter the phone number to which you want to forward calls.

When you're online with the Skype service, you can have your status displayed so other Skype users will be able to find and call you via the Skype network. If you don't want to be disturbed by incoming calls, access the My Info screen and tap on the Status option. From the Status window, select Do Not Disturb or Invisible.

**TIP**

Beyond using FaceTime or Skype for video conferencing, there are other online-based video conferencing services that offer proprietary iPhone and iPad apps. For example, ooVoo Video Chat allows users to engage in video calls, for free, with multiple people at once. There's also the GoToMeeting service, which is fee-based.

For making and receiving voice-over-IP calls, the Line2 app for the iPad, transforms your tablet into a full-featured telephone, with its own phone number. This is a fee-based service. The Beeztel: Free Calls & SMS allows you to make/receive VoIP calls for free.

To discover additional services (and apps) for making/receiving Internet-based calls and for video calling, use the Search field within the App Store and enter the search phrase "VoIP" or "video conferencing."